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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,765	11/18/2002	Daw-I Wang	ALIP0005USA	9206

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EXAMINER	
AGUSTIN, PETER VINCENT	

ART UNIT	PAPER NUMBER
2627	

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/065,765	WANG ET AL.	
	Examiner	Art Unit	
	P. Agustin	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 11-20 are now pending.

Claim Objections

2. Claim 11 is objected to because of the following informalities:

Claim 11, line 7: "being not coupled" should be --not being coupled--.

Appropriate correction is required.

Specification

3. The amendment filed February 23, 2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

(i) in claims 11 & 17, the recitation "whereby data recording does not need to be synchronized with the spindle motor operation" (note that this feature was added in the amendment filed September 2, 2005). Applicant alleged on page 4, item 2 of the response filed September 2, 2005 that Figure 1 and paragraphs 0013 & 0014 of the specification disclose this feature. The Examiner disagrees. Figure 1 and paragraphs 0013 and 0014 of the Applicant's disclosure teach components of a first circuit 10 and a second circuit 40. However, there is no mention that data recording does not need to be synchronized with the spindle motor operation, as claimed.

(ii) in claim 11, the recitation "the circuit being not coupled to the wobbled signal", and in claim 17, the recitation "generating the control signal...not according to the wobble signal". Applicant alleges on page 5, paragraph 1 that Figure 1 and paragraphs

0013 & 0014 of the specification disclose this feature. The Examiner disagrees. Figure 1 and paragraphs 0013 and 0014 of the Applicant's disclosure teach components of a first circuit 10 and a second circuit 40. However, there is no mention that the circuit is not coupled to the wobbled signal, or generating the control signal "not" according to the wobble signal.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 11-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 11 & 17 recite "whereby data recording does not need to be synchronized with the spindle motor operation"; claim 11 recites "the circuit being not coupled to the wobble signal"; and claim 17 recites "generating the control signal...not according to the wobble signal", which limitations have not been described in the original disclosure, and therefore, constitutes new matter.

Claims 12-16 & 18-20 are dependent upon rejected base claims.

6. Claims 11-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 11 & 17 recite "whereby data recording does not need to be synchronized with the spindle motor operation"; claim 11 recites "the circuit being not coupled to the wobble signal"; and claim 17 recites "generating the control signal...not according to the wobble signal". There is no disclosure of a structure on how these functions are achieved so as to enable one skilled in the art to make and use the claimed invention.

Claims 12-16 & 18-20 are dependent upon rejected base claims.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01.

Claim 11 recites the intended use/function "whereby data recording does not need to be synchronized with the spindle motor operation" but does not positively recite a specific structure that performs this function.

Claim 17 recites the intended use/function "whereby data recording does not need to be synchronized with the spindle motor operation" but does not positively recite a specific step that achieves this function.

Claims 12-16 & 18-20 are dependent upon rejected base claims.

9. Claims 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 recites the limitations "the circuit being **not** coupled to the wobble signal" on line 7 and "whereby data recording does **not** need to be synchronized with the spindle motor operations" on the last two lines. Claim 17 recites the limitations "generating the control signal...**not** according to the wobble signal" on lines 7-8 and "whereby data recording does **not** need to be synchronized with the spindle motor operation" on the last two lines. These are negative limitations that render the claims indefinite because they are attempts to claim the invention by excluding what the inventors **did not invent** rather than distinctly and particularly pointing out what they did invent.

Claims 12-16 & 18-20 are dependent upon rejected base claims.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 11, 14-17, 19 & 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsui et al. (US 6,118,742).

In so far as the claims are definite, clear and understood:

In regard to claim 11, Matsui et al. disclose an optical disc system (Figure 5) for recording data to an optical disc (104), the optical disc system comprising: an optical pickup unit

(105) for accessing data on the disc and producing a wobble signal (WOBBLE); a spindle motor (119) for rotating the disc according to a control signal (e.g., output of 116); a circuit (116) for generating the control signal according to a rotation speed of the spindle motor, the circuit being not coupled to the wobble signal; a phase locked loop (109) for extracting a carrier frequency of the wobble signal; a clock synthesizer (109: note that element 109 corresponds to both the claimed phase-locked loop and clock synthesizer; see column 18, lines 21-24) for producing a channel clock corresponding to a linear velocity, according to the wobble signal carrier frequency; an encoding unit (136) for encoding incoming data utilizing the channel clock, and then for producing a corresponding data signal for driving the optical pickup unit to record data to the optical disc; whereby data recording does not need to be synchronized with the spindle motor operation (considered inherent, see MPEP § 2112.01).

In regard to claim 14, Matsui et al. disclose that the optical pickup is a laser pickup (understood since 104 is a DVD-RAM disk).

In regard to claim 15, Matsui et al. disclose that the optical disc system is an optical disc recorder (understood since 104 is a DVD-RAM disk).

In regard to claim 16, Matsui et al. disclose that the spindle motor rotates the optical disc at constant angular velocity (column 19, lines 33-35).

Claims 17, 19 & 20 have limitations similar to those of claims 11, 15 & 16; thus, they are rejected on the same basis.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 12 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsui et al.

For a description of Matsui et al., see the rejection above. However, in regard to claim 12, Matsui et al. do not explicitly disclose a preamplifier connected between the optical pickup unit and the PLL for amplifying the wobble signal output by the optical pickup unit.

Official Notice is taken that both the concept and advantages of preamplifiers for amplifying wobble signals are notoriously old and well-known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention by the Applicant to have added a preamplifier for amplifying the wobble signal of Matsui et al., the motivation being to strengthen the wobble signal, thereby ensuring a more accurate detection.

Claim 18 has limitations similar to those of claim 12; thus, it is rejected on the same basis.

14. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsui et al. in view of Masaki et al. (US 5,732,055).

In regard to claim 13, Matsui et al. disclose that the encoding unit further comprises: a data encoder (suggested by RECORD-SIGNAL GENERATING CIRCUIT 136), for encoding data according to the channel clock; and a laser driver (inherent component that drives the laser and controls the pickup), for controlling the optical pickup unit for recording to the optical disc. However, in regard to claim 13, Matsui et al. does not explicitly disclose that the encoding unit comprises a firmware for transforming the encoded data into a pulse train.

Masaki et al. disclose a firmware for transforming encoded data into a pulse train (column 1, line 56 thru column 2, line 6). It would have been obvious to one of ordinary skill in the art at the time of the invention by the Applicant to have applied the teachings of Masaki et al. to the system of Matsui et al., the motivation being to increase recording density (column 1, line 58).

Response to Arguments

15. Applicant's arguments filed February 23, 2006 have been fully considered but they are not persuasive.

a. In response to Applicant's argument on page 5, last paragraph that the amendments to the claims do not constitute new matter, the Examiner notes that the previously added limitation "whereby data recording does not need to be synchronized with the spindle motor operation" is a negative limitation. The Applicant is directed to MPEP 2173.05(i), which states that "any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement".

b. In response to Applicant's arguments on page 8, paragraph 1 that Matsui fails to teach or suggest the claimed limitation "a circuit for generating the control signal according to a rotation speed of the spindle motor, the circuit being not coupled to the wobble signal", the Applicant is directed to Figure 5, which shows a selector 115, which outputs a signal to PWM-signal generating circuit 116 according to one of two inputs: one of the inputs coming from calculator 124 and another one of the inputs coming from calculator 114. At any given time, the selector receives only one of these inputs, and

therefore, the inputs are independent from each other. Element 116 corresponds to the claimed "circuit for generating the control signal according to a rotation speed of the spindle motor", which is clearly "not coupled to the wobble signal".

16. Applicant's failure to adequately traverse the Examiner's taking of Official Notice in the last Office Action is taken as an admission of fact(s) noticed. See MPEP § 2144.03.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to P. Agustin whose telephone number is 571-272-7567. The examiner can normally be reached on Monday-Friday 9:30-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. L. Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

P. Agustin
Art Unit 2627

BRIAN E. MILLER
PRIMARY EXAMINER